

PATENT CLAIMS:

1. A method for batching articles having different weights into a plurality of batches at a number of collection positions, wherein each completed batch comprises a plurality of articles and has a sum weight within a predetermined weight range, said method including:
- 5 providing a serial flow of articles on a conveyor;
weighing each article in the flow and recording the weights of the articles;
10 conveying the recorded articles to a batching section;
allocating the recorded articles to a collection position within a predetermined decision time period;
placing an allocated article in the predetermined collection position; and
emptying a collection position when the predetermined sum weight is obtained;
15 whereby
said allocation is performed on the basis of the weight of the recorded articles that are not yet positioned in one of the collection positions, and the content of the predetermined collection position.
- 20 2. A method according to claim 1, where the predetermined decision time is set by means of transport of the article from the start of the batching section to the selected collection position.
- 25 3. A method according to claim 1 or 2, including the step of establishing a historical frequency distribution on the basis of the recordings of the articles and using this historical frequency distribution in the allocation of recorded articles.
4. A method according to any of claims 1 to 3, whereby predetermined sets of batching parameters are defined for each batch and on which the allocation of articles is based, said predetermined sets of parameters include the following parameters:
- 30 - batch target sum weight

- acceptable batch overweight
- acceptable batch underweight

5 5. A method according to claim 4, whereby said predetermined sets of parameters further include some or all of the following parameters

- maximum article weight
- minimum article weight
- maximum number of articles
- minimum number of articles.

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6. A method according to any of claims 1 to 5, wherein each article consists of one or more articles.

7. A method according to claim 6, wherein said articles are food articles.

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8. A method according to any of claims 1 to 7, wherein each of the collection positions are provided with a bin, which preferably is subdivided into two collection bins, and that an article may be directed to one of the two collection bins in response to the allocation of the recorded articles.

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9. A method according to any of claims 1 to 8, wherein the articles are provided in a continuous flow through the weighing and the batching section.

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10. An apparatus for batching articles having different weights into a plurality of batches at a number of collection positions, wherein each completed batch comprises a plurality of articles and has a sum weight within a predetermined weight range; said apparatus comprising:

weighing means for recording the weight of the articles;

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means for conveying articles provided thereon in series, said articles being conveyed through the weighing means and into a batching section;

5 computing means for allocating the recorded articles to a collection position within a predetermined decision time period; said allocation is performed on the basis of the weight of the recorded articles that are not yet placed in one of the collection positions, and the content of the predetermined collection position;

10 deflection means for directing each of the articles into the predetermined collection position in response to a computed allocation; and

means for emptying a collection position when the predetermined sum weight is obtained.

15 11. An apparatus according to claim 10, wherein an initial flow section on the conveyor means, where no collection positions are arranged along side the conveyor means.

20 12. Use of an apparatus according to claim 10 or 11 for the performance of a method according to any of the claims 1 to 9.